

What Is Claimed Is:

- 1 1. A method for dynamic gamma adjustment of an LCD having
2 a data driver and a gate driver, comprising the following steps:
3 detecting a brightness data of a data signal provided by
4 the data driver; and
5 providing a gamma signal according to the brightness data
6 to the data driver.
- 1 2. The method as claimed in claim 1, wherein the
2 brightness data represents a gray-level distribution of a single
3 frame.
- 1 3. The method as claimed in claim 1, wherein the
2 brightness data represents an average gray-level distribution
3 of a plurality of frames.
- 1 4. The method as claimed in claim 1, wherein the gamma
2 signal enhances the brightness resolution of a low gray level
3 when the brightness data belongs to a low gray level.
- 1 5. The method as claimed in claim 1, wherein the gamma
2 signal enhances the brightness resolution of a high gray level
3 when the brightness data belongs to a high gray level.
- 1 6. The method as claimed in claim 1, wherein the gamma
2 signal adjusts a voltage level of the data signal presenting a
3 predetermined gray level.
- 1 7. The method as claimed in claim 1, wherein the data
2 signal is a digital signal.

1 8. A circuit for dynamic gamma adjustment of an LCD
2 having a data driver and a gate driver, comprising:
3 a brightness sampling circuit for detecting a brightness
4 data of a data signal provided by the data driver;
5 a brightness classifying circuit for classifying the
6 brightness data into a predetermined brightness
7 group; and
8 a gamma decision circuit for providing a predetermined
9 gamma signal of the predetermined brightness group
10 to the data driver.

1 9. The circuit as claimed in claim 8, wherein the data
2 signal is a digital signal.

1 10. The circuit as claimed in claim 9, wherein the
2 brightness sampling circuit obtains the brightness data by
3 analyzing the digital signal.

1 11. The circuit as claimed in claim 8, wherein the
2 brightness data represents a gray-level distribution of a single
3 frame.

1 12. The circuit as claimed in claim 8, wherein the
2 brightness data represents an average gray-level distribution
3 of a plurality of frames.

1 13. The circuit as claimed in claim 8, wherein the gamma
2 signal output by the gamma decision circuit enhances the
3 brightness resolution of a low gray level when the brightness
4 data belongs to a low gray level.

1 14. The circuit as claimed in claim 8, wherein the gamma
2 signal output by the gamma decision circuit enhances the
3 brightness resolution of a high gray level when the brightness
4 data belongs to a high gray level.

1 15. The circuit as claimed in claim 8, wherein the gamma
2 signal output by the gamma decision circuit adjusts a voltage
3 level of the data signal presenting a predetermined gray level.